

ABSTRACT OF THE DISCLOSURE

[24] A cooling system for a gas turbine engine includes a fuel deoxygenator for increasing the cooling capacity of the fuel. The fuel deoxygenator removes dissolved gases from the fuel to prevent the formation of insoluble deposits. The prevention of insoluble deposits increases the usable cooling capacity of the fuel. The increased cooling capacity of the deoxygenated fuel provides a greater heat sink for cooling air used to protect engine components. The improved cooling capacity of the cooling air provides for increased engine operating temperatures that improves overall engine efficiency.